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STRUCTURE FILE UPDATES: 9 SEP 2002 HIGHEST RN 448894-79-9  
DICTIONARY FILE UPDATES: 9 SEP 2002 HIGHEST RN 448894-79-9

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES  
for more information. See STNNote 27, Searching Properties in the CAS  
Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> s [qka] [kgaw] [ark] [krq] [nwa] [rfwqe] /sqsp  
L1 12879 [QKA] [KGAW] [ARK] [KRQ] [NWA] [RFWQE] /SQSP

=> s l1 and (cyclic or bridge) /nte  
14952 CYCLIC/NTE  
51089 BRIDGE/NTE  
L2 16 L1 AND (CYCLIC OR BRIDGE) /NTE

=> d l2 sqd, bib 1-16

L2 ANSWER 1 OF 16 REGISTRY COPYRIGHT 2002 ACS  
RN 329077-30-7 REGISTRY  
FS PROTEIN SEQUENCE; STEREOSEARCH  
SQL 18  
NTE **cyclic**

SEQ 1 ARRAEYAKKY PPYEYAKK  
===== =  
HITS AT: 1-5, 18

REFERENCE 1

AN 134:208139 CA  
TI Synthesis of template-fixed .beta.-hairpin loop mimetics  
IN Robinson, John A.; Obrecht, Daniel  
PA Polyphor A.-G., Switz.  
SO PCT Int. Appl., 83 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001016161	A1	20010308	WO 1999-EP6369	19990830
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,				

IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD,  
 MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,  
 SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 BR 9917475 A 20020514 BR 1999-17475 19990830  
 EP 1214336 A1 20020619 EP 1999-946064 19990830  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL  
 PRAI WO 1999-EP6369 19990830  
 RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 16 REGISTRY COPYRIGHT 2002 ACS  
 RN 329077-29-4 REGISTRY  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 18  
 NTE **cyclic**

SEQ 1 ARRAEFAPKY PPYEYAYK  
 =====  
 HITS AT: 1-5, 18

# REFERENCE 1

AN 134:208139 CA  
 TI Synthesis of template-fixed .beta.-hairpin loop mimetics  
 IN Robinson, John A.; Obrecht, Daniel  
 PA Polyphor A.-G., Switz.  
 SO PCT Int. Appl., 83 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

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WO 2001016161	A1	20010308	WO 1999-EP6369	19990830
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG BR 9917475 A 20020514 BR 1999-17475 19990830 EP 1214336 A1 20020619 EP 1999-946064 19990830 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL PRAI WO 1999-EP6369 19990830 RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L2 ANSWER 3 OF 16 REGISTRY COPYRIGHT 2002 ACS  
 RN 200888-88-6 REGISTRY  
 FS PROTEIN SEQUENCE  
 SQL 64,16,16,16,16  
 NTE multichain  
 modified (modifications unspecified)

type	location	description
------	----------	-------------

bridge	Ala-1	- Ala-1'	covalent bridge, tetramer
bridge	Ala-1'	- Ala-1''	covalent bridge, tetramer
bridge	Ala-1''	- Ala-1'''	covalent bridge, tetramer

SEQ 1 ARRAARAAAR RARAEA

=== ===

HITS AT: 8-13

SEQ 1 ARRAARAAAR RARAEA

=== ===

HITS AT: 8-13

SEQ 1 ARRAARAAAR RARAEA

=== ===

HITS AT: 8-13

SEQ 1 ARRAARAAAR RARAEA

=== ===

HITS AT: 8-13

REFERENCE 1

AN 128:93197 CA  
 TI Novel heparin-binding peptides  
 IN Harris, Robert B.; Sobel, Michael  
 PA Commonwealth Biotechnologies, Inc., USA  
 SO PCT Int. Appl., 61 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9747312	A1	19971218	WO 1997-US9037	19970603
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5877153	A	19990302	US 1996-660592	19960611
	CA 2257614	AA	19971218	CA 1997-2257614	19970603
	AU 9732167	A1	19980107	AU 1997-32167	19970603
	EP 907368	A1	19990414	EP 1997-927795	19970603
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2001503018	T2	20010306	JP 1998-501628	19970603
PRAI	US 1996-660592		19960611		
	WO 1997-US9037		19970603		

L2 ANSWER 4 OF 16 REGISTRY COPYRIGHT 2002 ACS  
 RN 200888-87-5 REGISTRY  
 FS PROTEIN SEQUENCE  
 SQL 48,16,16,16  
 NTE multichain  
 modified (modifications unspecified)

type	location	description
bridge	Ala-1 - Ala-1'	covalent bridge, trimer

bridge Ala-1' - Ala-1'' covalent bridge, trimer

SEQ 1 ARRAARAAAR RARAEA

=== ===

HITS AT: 8-13

SEQ 1 ARRAARAAAR RARAEA

=== ===

HITS AT: 8-13

SEQ 1 ARRAARAAAR RARAEA

=== ===

HITS AT: 8-13

REFERENCE 1

AN 128:93197 CA

TI Novel heparin-binding peptides

IN Harris, Robert B.; Sobel, Michael

PA Commonwealth Biotechnologies, Inc., USA

SO PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9747312	A1	19971218	WO 1997-US9037	19970603
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	US 5877153	A	19990302	US 1996-660592	19960611
	CA 2257614	AA	19971218	CA 1997-2257614	19970603
	AU 9732167	A1	19980107	AU 1997-32167	19970603
	EP 907368	A1	19990414	EP 1997-927795	19970603
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
	JP 2001503018	T2	20010306	JP 1998-501628	19970603
PRAI	US 1996-660592		19960611		
	WO 1997-US9037		19970603		

L2 ANSWER 5 OF 16 REGISTRY COPYRIGHT 2002 ACS

RN 200888-86-4 REGISTRY

FS PROTEIN SEQUENCE

SQL 38,19,19

NTE multichain

modified (modifications unspecified)

type ----- location ----- description

bridge Ala-1 - Ala-1' covalent bridge, dimer

SEQ 1 ARAARRAARA AARRARAEA

=====

HITS AT: 11-16

SEQ 1 ARAARRAARA AARRARAEA

HITS AT: 11-16

REFERENCE 1

AN 128:93197 CA  
TI Novel heparin-binding peptides  
IN Harris, Robert B.; Sobel, Michael  
PA Commonwealth Biotechnologies, Inc., USA  
SO PCT Int. Appl., 61 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9747312	A1	19971218	WO 1997-US9037	19970603
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	US 5877153	A	19990302	US 1996-660592	19960611
	CA 2257614	AA	19971218	CA 1997-2257614	19970603
	AU 9732167	A1	19980107	AU 1997-32167	19970603
	EP 907368	A1	19990414	EP 1997-927795	19970603
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
	JP 2001503018	T2	20010306	JP 1998-501628	19970603
PRAI	US 1996-660592		19960611		
	WO 1997-US9037		19970603		

L2 ANSWER 6 OF 16 REGISTRY COPYRIGHT 2002 ACS  
RN 197102-98-0 REGISTRY  
FS PROTEIN SEQUENCE  
SQL 551  
NTE

type	location	description
bridge	Cys-492 - Cys-525	disulfide bridge

SEQ 1 SNLWSTRPER VQEGSTVLIN GPQFGWYNPA YTYGIGLHGA GFDVVGNTPF  
51 AYPIVLFGTN SEIAWGATAG PQDVVDIYQE KLNPSRADQY WFNNAWRTME  
101 QRKERIQVRG QADREMTIWR TVHGPVMQFD YDQGAAYSKK RSWDGYEVQS  
151 LLAWLNVAKA RNWTEFLDQA SKMAISINWY YADKHGNIGY VSPAFLPQRP  
=====  
201 ADQDIRVPAK GDGSMEWLGI KSFDAIPKAY NPPQGYLVNW NNKPAPDKTN  
251 TDITYYWTYGD RMNELVSQYQ QKDLFSVQEI WEFNQKASYS DVNWRYFRPH  
301 LEKLAQQLPA DDSSKAALTM LLAWDGMEQD QGGQNAGPAR VLFKWTLEEM  
351 YKQVLMPPVP ESHRAMYSQT GFATQQGPNP GSINLSMGTK VLLRALVLEA  
401 HPDPKRVNVF GERSSQEIMH TALQNAQARL SQEQGAQMAR WTMPTSVHRF  
451 SDKNFTGTPO TMPGNTFAFT GYQNRGTENN RVVFDAGVE FCDAMPPGQS  
501 GFTDRNGVRS PHYEDQLKLY ENFECKTMDV THADIRRNAQ SSTMLLIQPO  
551 P

HITS AT: 158-163

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1

AN 127:303825 CA  
 TI Molecular cloning and analysis of the gene encoding the thermostable penicillin G acylase from *Alcaligenes faecalis*  
 AU Verhaert, Raymond M. D.; Riemens, Anja M.; van der Laan, Jan-Metske; van Duin, Jan; Quax, Wim J.  
 CS Leiden Institute of Chemistry, Gorlaeus Laboratories, Leiden University, Leiden, 2300 RA, Neth.  
 SO Applied and Environmental Microbiology (1997), 63(9), 3412-3418  
 CODEN: AEMIDF; ISSN: 0099-2240  
 PB American Society for Microbiology  
 DT Journal  
 LA English

L2 ANSWER 7 OF 16 REGISTRY COPYRIGHT 2002 ACS  
 RN 162123-34-4 REGISTRY  
 FS PROTEIN SEQUENCE  
 SQL 653  
 NTE

type	location	description
bridge	Cys-211 - Cys-421	disulfide bridge
bridge	Cys-217 - Cys-285	disulfide bridge
bridge	Cys-241 - Cys-263	disulfide bridge

SEQ 1 MKRICGSLLL LGLSISAALA APASRPAAFD YANLSSVDKV ALRTMPAVDV  
 51 AKAKAEDLQR DKRGDIPRFA LAIDVDMTPQ NSGAWEYTAD GQFAVWRQRV  
 =====  
 101 RSEKALSLNF GFTDYMPAG GRLLVYPATQ APAGDRGLIS QYDASNNSA  
 151 RQLWTAVVPG AEAVIEAVIP RDKVGEFKLR LTKVNH DYVG FGPLARRLAA  
 201 ASGEKGVSGS CNIDVVCPEG DGRDRIIRAV GAYSKSGTLA CTGSLVNNTA  
 251 NDRKMYFLTA HHCGMGTA ST AASIVVYWNY QNSTCRAPNT PASGANGDGS  
 301 MSQTQSGSTV KATYATSDFT LLELNNAANP AFNLFWAGWD RRDQNYPGAI  
 351 AIHHPNVAEK RISNSTSPTS FVAWGGGAGT THLNVQWQPS GGVTEPGSSG  
 401 SPIYSPEKRV LGELHGGPSS CSATGTNRSD QYGRVFTSWT GGGAAASRLS  
 451 DWLDPASTGA QFIDGLDSGG GTPNTPPVAN FTSTTSGLTA TFTDSSTDSD  
 501 GSIASRSWNF GDGSTSTATN PSKTYAAAGT YTVTLTVTDN GGATNTKTGS  
 551 VTVSGGPGAQ TYTNDTDVAI PDNATVESPI TVSGRTGNGS ATTPIQVTIY  
 601 HTYKSDLKVD LVAPDGTVYN LHNRTGGS AH NIIQTFTKDL SSEAAQRAPG  
 651 SCG

HITS AT: 51-56

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1

AN 122:233986 CA  
 TI Lysyl endopeptidase of *Achromobacter lyticus*  
 AU Sakiyama, Fumio; Masaki, Takeharu  
 CS Institute Protein Research, Osaka University, Osaka, 565, Japan  
 SO Methods in Enzymology (1994), 244(Proteolytic Enzymes: Serine and Cysteine Peptidases), 126-37  
 CODEN: MENZAU; ISSN: 0076-6879  
 DT Journal  
 LA English

L2 ANSWER 8 OF 16 REGISTRY COPYRIGHT 2002 ACS  
 RN 161413-85-0 REGISTRY  
 FS PROTEIN SEQUENCE  
 SQL 73,22,19,17,15  
 NTE multichain  
 modified

type	location	description
terminal mod.	Asp-1 -	N-acetyl
terminal mod.	Orn-22 -	C-terminal amide
terminal mod.	Glu-1'' -	N-acetyl
terminal mod.	Ser-1''' -	N-acetyl
bridge	Lys-21 - Ala-15'''	amide bridge
bridge	Orn-22 - Lys-19'	amide bridge
bridge	Lys-19' - Ala-17''	amide bridge
uncommon	Orn-22 -	-

SEQ 1 DEAGKKAEEE LKKLLEELKK KX

=====

HITS AT: 3-8

SEQ 1 HEEAKKKA EK LLEELKKLK

=====

HITS AT: 4-9

SEQ 1 EEAEKAKRL LEELKKA

SEQ 1 SEKAKLLEE LKKLA

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1

AN 122:155196 CA  
 TI Studies on chymotrypsin-like catalysis by synthetic peptides  
 AU Corey, Michael J.; Hallakova, Eva; Pugh, Kathleen; Stewart, John M.  
 CS Sch. Med., Univ. Colorado, Denver, CO, 80262, USA  
 SO Applied Biochemistry and Biotechnology (1994), 47(2-3), 199-212  
 CODEN: ABIBDL; ISSN: 0273-2289  
 DT Journal  
 LA English

L2 ANSWER 9 OF 16 REGISTRY COPYRIGHT 2002 ACS  
 RN 144998-79-8 REGISTRY  
 FS PROTEIN SEQUENCE  
 SQL 240  
 NTE modified (modifications unspecified)

type	location	description
bridge	Cys-2 - Cys-24	disulfide bridge

SEQ 1 WCLESSQSQD LSTESNLLAC IRACKPDLSA ETPVFPGNGD AQPLTENPRK  
 51 YVMGHFRWDR FGRRNGSSSG GGGGGGGAGQ KREEEVAAG EGPGRGDGV  
 101 APGPRQDKRS YSMEHFRWGK PVGKKRRPVK VYPNGAEDEL AEAFPLEFRR  
 151 ELAGAPPEPA RDPEAPAEA AARAELEYGL VAEAEAAEKK DEGPYMEHFR

= =====

201 WGSPPKDKRY GGFMTSEK SQ TPLVTLFKNA IVKNAHKKGQ  
 HITS AT: 170-175

REFERENCE 1

AN 118:16412 CA  
 TI Investigation of a possible role of the amino-terminal pro-region of  
 proopiomelanocortin in its processing and targeting to secretory granules  
 AU Roy, Patrice; Chevrier, Daniel; Fournier, Helene; Racine, Chantal;  
 Zollinger, Max; Crine, Philippe; Boileau, Guy



CS Fac. Med., Univ. Montreal, Montreal, PQ, H3C 3J7, Can.  
 SO Mol. Cell. Endocrinol. (1991), 82(2-3), 237-50  
 CODEN: MCEND6; ISSN: 0303-7207  
 DT Journal  
 LA English

L2 ANSWER 10 OF 16 REGISTRY COPYRIGHT 2002 ACS  
 RN 144998-78-7 REGISTRY  
 FS PROTEIN SEQUENCE  
 SQL 241  
 NTE modified (modifications unspecified)

type	location	description
bridge	Cys-8 - Cys-20	disulfide bridge

SEQ 1 WSLESSQCQD LSTESNLLAC IRACKPDLSA ETPVFPGNGD AQPLTENPRK  
 51 YVMGHFRWDR FGRRNGSSSG GGGGGGGAGQ KREEEVAAG EGPGRGDGV  
 101 APGPRQDKRS YSMEHFRWGK PVGKKRRPVK VYPNGAEDEL AEAFFLEFRR  
 151 ELAGAPPEPA RDPEAPAEGA AARAELEYGL VAEAEAAEKK DEGPYKMEHF  
 = =====  
 201 RWGSPPKDKR YGGFMTSEKS QTPLVTLFKN AIVKNAHKKG Q  
 HITS AT: 170-175

# REFERENCE 1

AN 118:16412 CA  
 TI Investigation of a possible role of the amino-terminal pro-region of  
 proopiomelanocortin in its processing and targeting to secretory granules  
 AU Roy, Patrice; Chevrier, Daniel; Fournier, Helene; Racine, Chantal;  
 Zollinger, Max; Crine, Philippe; Boileau, Guy  
 CS Fac. Med., Univ. Montreal, Montreal, PQ, H3C 3J7, Can.  
 SO Mol. Cell. Endocrinol. (1991), 82(2-3), 237-50  
 CODEN: MCEND6; ISSN: 0303-7207  
 DT Journal  
 LA English

L2 ANSWER 11 OF 16 REGISTRY COPYRIGHT 2002 ACS  
 RN 143973-78-8 REGISTRY  
 FS PROTEIN SEQUENCE  
 SQL 527  
 NTE

type	location	description
bridge	Cys-6 - Cys-36	disulfide bridge
bridge	Cys-34 - Cys-43	disulfide bridge
bridge	Cys-51 - Cys-62	disulfide bridge
bridge	Cys-56 - Cys-73	disulfide bridge
bridge	Cys-75 - Cys-84	disulfide bridge
bridge	Cys-92 - Cys-173	disulfide bridge
bridge	Cys-113 - Cys-155	disulfide bridge
bridge	Cys-144 - Cys-168	disulfide bridge
bridge	Cys-180 - Cys-261	disulfide bridge
bridge	Cys-201 - Cys-243	disulfide bridge
bridge	Cys-232 - Cys-256	disulfide bridge
bridge	Cys-264 - Cys-395	disulfide bridge
bridge	Cys-307 - Cys-323	disulfide bridge
bridge	Cys-315 - Cys-384	disulfide bridge
bridge	Cys-409 - Cys-484	disulfide bridge
bridge	Cys-441 - Cys-457	disulfide bridge
bridge	Cys-474 - Cys-502	disulfide bridge

```

SEQ      1 SYQVICRDEK TQMIYQQHQ S WLRPVLRSNR VEYCWNSGR AQCHSVPVKS
      51 CSEPRCFNGG TCQQALYFSD FVCQCPEGFA GKCCEIDTRA TCYAAQGISY
     101 RGTWSTAESG AECTNWNSSA LAQKPYSGRR PDAIRLGLGN HNYCRNPDRD
     151 SKPWCYVFKA GKYSSEFCST PACSEGNSDC YFGNGSAYRG THSLTESGAS
     201 CLPWNMILI GKVYTAQNPS AQALGLGKHN YCRNPDGDAK PWCHVLKNRR
     251 LTWEYCDVPS CSTCGLRQYS QPQFRIKGGL FADIASHPWQ AAIFAKHRRS
     301 PGERFLCGGI LISSCWILSA AHCQERFPP HHLTVILGRT YRVVPGAAQ
                                     =====
     351 AFEVEKYIVH KEFDDDTYDN DIALQLKSD SSRCAQESSV VRTVCLPPAD
                                     ==
     401 LQLPDWTECE LSGYGKHEAL SPFYSERLKE AHVRLYPSSR CTSQHLLNHT
     451 VTDNMLCAGD TRSGGPQANL HDACQGDSSG PLVCLNDGRM TLVGIISWGL
     501 GCGQKDVPGV YTKVTNYLDW IRDNMRP

```

HITS AT: 347-352

# REFERENCE 1

AN 118:198180 CA  
TI Tissue plasminogen activator (t-PA) variants with decreased clearance  
IN Keyt, Bruce A.; Zoller, Mark J.  
PA Genentech, Inc., USA  
SO PCT Int. Appl., 42 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9202612	A2	19920220	WO 1991-US5418	19910730
	WO 9202612	A3	19920319		
	W: AU, CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	CA 2086835	AA	19920201	CA 1991-2086835	19910730
	AU 9184187	A1	19920302	AU 1991-84187	19910730
	AU 645344	B2	19940113		
	EP 542869	A1	19930526	EP 1991-915181	19910730
	EP 542869	B1	19950913		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 05509229	T2	19931222	JP 1991-513753	19910730
	JP 3126381	B2	20010122		
	US 5246850	A	19930921	US 1992-912040	19920709
	US 5338546	A	19940816	US 1993-33612	19930316
PRAI	US 1990-560515		19900731		
	WO 1991-US5418		19910730		
	US 1992-912040		19920709		

L2 ANSWER 12 OF 16 REGISTRY COPYRIGHT 2002 ACS  
RN 138725-98-1 REGISTRY  
FS PROTEIN SEQUENCE  
SQL 73,22,19,17,15  
NTE multichain  
modified

type	location	description
terminal mod.	Asp-1	N-acetyl
terminal mod.	-22	C-terminal amide
terminal mod.	His-1'	N-acetyl
terminal mod.	Glu-1''	N-acetyl
terminal mod.	Ser-1'''	N-acetyl
bridge	Lys-21	- Ala-15'''
bridge	Orn-22	- Lys-19'
bridge	Lys-19'	- Ala-17''

uncommon                    Orn-22                    -                    -

SEQ            1 DEAGKKAEEE LKKLLEELKK KX

=====

HITS AT:    3-8

SEQ            1 HEEAKKKAEEK LLEELKKLK

=====

HITS AT:    4-9

SEQ            1 EEAEKAKRD LEELKKA

SEQ            1 SEKAKLLEE LKKLA

REFERENCE    1

AN    116:79399    CA

TI    Synthetic helizyme enzymes

IN    Stewart, John M.; Hahn, Karl W.; Klis, Wieslaw A.

PA    University of Colorado Foundation, Inc., USA

SO    PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DT    Patent

LA    English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9110733	A1	19910725	WO 1991-US425	19910116
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	US 5304631	A	19940419	US 1990-464932	19900116
PRAI	US 1990-464932		19900116		

L2    ANSWER 13 OF 16    REGISTRY    COPYRIGHT 2002 ACS

RN    138725-97-0    REGISTRY

FS    PROTEIN SEQUENCE

SQL    73,22,19,17,15

NTE    multichain

modified

type	location		description
terminal mod.	Asp-1	-	N-acetyl
terminal mod.	-22	-	C-terminal amide
terminal mod.	His-1'	-	N-acetyl
terminal mod.	Glu-1''	-	N-acetyl
terminal mod.	Ser-1'''	-	N-acetyl
bridge	Lys-21	- Ala-15'''	amide bridge
bridge	Orn-22	- Lys-19'	amide bridge
bridge	Lys-19'	- Ala-17''	amide bridge
uncommon	Orn-22	-	-

SEQ            1 DEAGKKAEEE LKKLLEELKK KX

=====

HITS AT:    3-8

SEQ            1 HEEAKKKAEEK LLEELKKLK

=====

HITS AT:    4-9

SEQ            1 EEAEKAKRL LEELKKA

SEQ 1 SEKAKKDLEE LKKLA

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CODEN: PIXXD2  
DT Patent  
LA English  
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	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9110733	A1	19910725	WO 1991-US425	19910116
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	US 5304631	A	19940419	US 1990-464932	19900116
PRAI	US 1990-464932		19900116		

L2 ANSWER 14 OF 16 REGISTRY COPYRIGHT 2002 ACS  
RN 128874-09-9 REGISTRY  
DR 138726-00-8, 138988-30-4  
FS PROTEIN SEQUENCE  
SQL 73,22,19,17,15  
NTE multichain  
modified

type	location		description
terminal mod.	Asp-1	-	N-acetyl
terminal mod.	Orn-22	-	C-terminal amide
terminal mod.	His-1'	-	N-acetyl
terminal mod.	Glu-1''	-	N-acetyl
terminal mod.	Ser-1'''	-	N-acetyl
bridge	Lys-21	- Ala-15'''	amide bridge
bridge	Orn-22	- Lys-19'	amide bridge
bridge	Lys-19'	- Ala-17''	amide bridge
uncommon	Orn-22	-	-

SEQ 1 DEAGKKAEEE LKKLLEELKK KX

=====

HITS AT: 3-8

SEQ 1 HEEAKKKA EK LLEELKKLK

=====

HITS AT: 4-9

SEQ 1 EEAEKAKRL LEELKKA

SEQ 1 SEKAKKLEE LKKLA

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1

AN 122:155196 CA  
TI Studies on chymotrypsin-like catalysis by synthetic peptides  
AU Corey, Michael J.; Hallakova, Eva; Pugh, Kathleen; Stewart, John M.  
CS Sch. Med., Univ. Colorado, Denver, CO, 80262, USA  
SO Applied Biochemistry and Biotechnology (1994), 47(2-3), 199-212  
CODEN: ABIBDL; ISSN: 0273-2289

DT Journal  
LA English

REFERENCE 2

AN 118:192282 CA  
TI Solid phase synthesis of a peptide designed to have enzymic activity  
AU Stewart, John M.; Cann, John R.; Corey, Michael J.; Hahn, Karl W.; Klis, Wieslaw A.  
CS Sch. Med., Univ. Colorado, Denver, CO, 80262, USA  
SO Innovation Perspect. Solid Phase Synth. Collect. Pap., Int. Symp., 2nd (1992), Meeting Date 1991, 23-7. Editor(s): Epton, Roger. Publisher: Intercept, Andover, UK.  
CODEN: 58OLAK  
DT Conference  
LA English

REFERENCE 3

AN 117:145854 CA  
TI Studies on chymohelizyme-1, a designed synthetic enzyme  
AU Stewart, John M.; Cann, John R.; Hahn, Karl W.; Klis, Wieslaw A.  
CS Sch. Med., Univ. Colorado, Denver, CO, 80262, USA  
SO Pept.: Chem. Biol., Proc. Am. Pept. Symp., 12th (1992), Meeting Date 1991, 335-6. Editor(s): Smith, John A.; Rivier, Jean E. Publisher: ESCOM, Leiden, Neth.  
CODEN: 57XGA9  
DT Conference  
LA English

REFERENCE 4

AN 117:131555 CA  
TI Design and synthesis of a peptide having chymotrypsin-like catalytic activity  
AU Stewart, John M.; Hahn, Karl W.; Klis, Wieslaw A.; Cann, John R.; Corey, Michael  
CS Sch. Med., Univ. Colorado, Denver, CO, 80262, USA  
SO Front. Bioprocess. 2, Proc. (1992), Meeting Date 1990, 63-9. Editor(s): Todd, Paul; Sikdar, Subhas K.; Bier, Milan. Publisher: ACS, Washington, D. C.  
CODEN: 57VFAU  
DT Conference  
LA English

REFERENCE 5

AN 116:101663 CA  
TI Design and synthesis of 'chymohelizyme-1', a peptide having chymotrypsin-like catalytic activity  
AU Stewart, John M.; Hahn, Karl W.; Klis, Wieslaw A.  
CS Sch. Med., Univ. Colorado, Denver, CO, 80262, USA  
SO Pept. 1990, Proc. Eur. Pept. Symp., 21st (1991), Meeting Date 1990, 574-6. Editor(s): Giralt, Ernest; Andreu, David. Publisher: ESCOM Sci. Publ., Leiden, Neth.  
CODEN: 57HNAI  
DT Conference  
LA English

REFERENCE 6

AN 113:93904 CA  
TI Design and synthesis of a peptide having chymotrypsin-like esterase activity

AU Hahn, Karl W.; Klis, Wieslaw A.; Stewart, John M.  
CS Med. Sch., Univ. Colorado, Denver, CO, 80262, USA  
SO Science (Washington, D. C., 1883-) (1990), 248(4962), 1544-7  
CODEN: SCIEAS; ISSN: 0036-8075  
DT Journal  
LA English

L2 ANSWER 15 OF 16 REGISTRY COPYRIGHT 2002 ACS  
RN 120945-90-6 REGISTRY  
FS PROTEIN SEQUENCE  
SQL 240  
NTE

type	location	description
bridge	Cys-145 - Cys-212	disulfide bridge
bridge	Cys-151 - Cys-193	disulfide bridge

SEQ 1 MYFKKRRWFL ILESLLLSLV TGFQDQSVPN VNAITGSNVT LTILKHPLAS  
=====

51 YQRLTWLHTT NQKILEYFPN GKKTVFESVF KDRVDLDKTN GALRIYNVSK  
101 EDRGDYMRM LHETEDQWKI TMEVYDLVSK PAIKIEKTKN LTDSCHLRLS  
151 CKVEDQGVYD TWYEDSGPFP QRNPGYVLEI TITPHNKSTF YTCQVSNPVS  
201 SENDTLYFIP PCTLARSSGV HWIAAWLVVT LSIIPSILLA

HITS AT: 4-9

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1

AN 111:1787 CA  
TI The MRC OX-45 antigen of rat leukocytes and endothelium is in a subset of the immunoglobulin superfamily with CD2, LFA-3 and carcinoembryonic antigens  
AU Killeen, Nigel; Moessner, Rainald; Arvieux, Josiane; Willis, Antony; Williams, Alan F.  
CS MRC Cell. Immunol. Unit, Sir William Dunn Sch. Pathol., Oxford, OX1 3RE, UK  
SO EMBO J. (1988), 7(10), 3087-91  
CODEN: EMJODG; ISSN: 0261-4189  
DT Journal  
LA English

L2 ANSWER 16 OF 16 REGISTRY COPYRIGHT 2002 ACS  
RN 75240-26-5 REGISTRY  
FS PROTEIN SEQUENCE; STEREOSEARCH  
SQL 14  
NTE

type	location	description
bridge	Lys-3 - Asp-14	lactam

SEQ 1 AGKKNFFWKT FTSD  
=====

HITS AT: 1-6

REFERENCE 1

AN 93:180017 CA  
TI Non-reducible cyclic, and azaphenylalanyl6 analogs of somatostatin  
AU Hirst, B. H.; Reed, J. D.; Shaw, B.; Hayward, C. F.; Morley, J. S.

CS Med. Sch., Univ. Newcastle upon Tyne, Newcastle upon Tyne, NE1 7RU, Engl.  
SO Eur. J. Pharmacol. (1980), 65(2-3), 151-6  
CODEN: EJPHAZ; ISSN: 0014-2999  
DT Journal  
LA English